#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

(Attorney Docket No. 14179US02)

In the Application of:

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Electronically Filed on April 2, 2010

Ed H. Frank

Serial No.: 10/658,514

Filed: September 09, 2003

For: METHOD AND SYSTEM FOR

NETWORK MANAGEMENT IN A HYBRID WIRED/WIRELESS

**NETWORK** 

Examiner: Chea, Philip J.

Group Art Unit: 2453

Confirmation No.: 1784

**REPLY BRIEF** 

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR 41.41, the Appellant submits this Reply Brief in response to the Examiner's Answer mailed on February 3, 2010 ("Examiner's Answer"), with a reply period through April 5, 2010. Claims 1-36 are pending in the present Application. The Appellant has responded to the Examiner in the Examiner's Answer, as found in the following Arguments section.

As may be verified in the Final Office Action (pages 2-7), dated May 11, 2009 ("Final Office Action"), claims 1-7, 9-16, 18-25, 27-34, and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over USPP 2001/0024434 ("Ayyagari") in view of USPP 2002/0165990 ("Singhal"). Claims 8, 17, 26, and 35 are rejected under 35 USC 103(a) as allegedly being unpatentable over Ayyagari and Singhal as applied to claims 1, 10, 19 and 28, and further in view of USPP 2003/0142651 ("Matta").

To aid the Board in identifying corresponding arguments, the Appellant has used the same headings in the Argument section of this Reply Brief as the headings found in the Appellant's corresponding Appeal Brief. The Appeal Brief has a date of deposit of October 14, 2009.

### STATUS OF THE CLAIMS

Claims 1-36 were finally rejected. Pending claims 1-36 are the subject of this appeal.

#### **ARGUMENTS**

### I-A. Independent Claims 1, 10, 19 and 28

The Appellant stands by the arguments made in the corresponding section of the Appeal Brief. Namely, the combination of Ayyagari and Singhal does not disclose or suggest at least the limitation of "receiving at a network device, from one or both of a first access point and/or a first switch, a first messaging protocol message containing quality of service (QoS) information," as recited in the Appellant's claim 1.

In regards to claims 1, 10, 19 and 28, the Examiner's Answer (page 6) states the following:

"A) Appellant contends that Ayyagari does not disclose receiving at a network device, from one or both of a first access point and/or a first switch, a first messaging protocol message containing quality of service (QoS) information.

...the Examiner respectfully disagrees. Examiner has distinctly pointed out that the network device is considered the router [235] and the access point is the access point [200]. The QoS message is considered a message requesting QoS. Since it's being sent from the access point to the router, it is the network device (router) that is receiving the request of QoS (see paragraph 48). The request of QoS is considered a message containing QoS information because the request contains QoS information so that the network can determine if it can support the requested QoS information. The specification does not provide any specific definition as to what the QoS information should contain and the claim is not specific as to what the QoS message should contain, so the Examiner interprets the request for QoS information as a message containing QoS information."

The Examiner, in effect, repeats his arguments from the Final Office Action. Initially, the Appellant respectfully disagrees with the Examiner that the

AP 200 qualifies as the alleged "AP". The Examiner alleges that Ayyagari's "message requesting QoS is considered a message containing QoS information because the request contains QoS information so that the network can determine if it can support the requested QoS information". The Appellant respectfully disagrees, and points out that the Examiner seems to have misinterpreted Appellant's claim language. Appellant's claim 1 recites "receiving" at a network device, from ... a first access point ..., a first messaging protocol message containing quality of service (QoS) information". In other words, the first messaging protocol message received by the network device, contains the actual QoS information of the first access point. Ayyagari, however, does not disclose that the AP 200 sends any messages containing its QoS information to the router 235 (the alleged "network device"). Instead, Ayyagari (at ¶0048) clearly discloses that the message the AP 200 sends to the router 235 (the alleged "network device"), is "to request for QoS". In other words, the router 235 (the alleged "network device") does not receive any QoS information from the message sent by the AP 200, since the router 235 has to query for QoS information of the AP 200 from another server at the receiving node 230.

Based on the foregoing rationale, the Appellant maintains that Ayyagari does not disclose or suggest "first messaging protocol message containing quality of service (QoS) information," as recited in Appellant's claim 1. Singhal does not overcome Ayyagari's above deficiency.

Secondly, the Examiner's Answer (page 6) states the following:

"Examiner concedes that the SBM can be a function of the access point. However, the Examiner believes the router, is a separate device from the access point. Fig. 2 shows the Access point [200], in communication with the router [235] as two separate devices. The access point sends a message requesting QoS to a router 235. Router 235 is not equivalent to SSM 240. Therefore, the rejection stands with the router considered as the network device, receiving a protocol message from an access point. The Appellant has not provided any evidence that the access point [200], SBM [240], and router [235] are the same device."

The Appellant now turns to Examiner's allegation that Ayyagari's AP 200 can be equated to Appellant's "AP". The Examiner concedes that "the SBM 240 can be a function of the AP 200". Ayyagari's abstract discloses that the SBM 240 is at the AP 200 forming the AP computing environment (see Ayyagari at ¶0047). In other words, Ayyagari discloses an integrated AP computing environment as a system, including both the AP 200 and the SBM 240 functions. Accordingly, the Examiner's argument that the Appellant needs to provide evidence that the SBM 240 and the AP 200 are the "same device" (i.e., to be equated to Appellant's "AP"), is moot.

Furthermore, Ayyagari's Fig. 2 discloses that the router 235 is a part of the SBM 240. Therefore, the router 235 is inherently a part of the alleged "AP" by virtue of being within the SBM 240. Therefore, the router 235 cannot be equated to Appellant's "network device". Accordingly, any message received by the router 235 (a part of Ayyagari's "AP") from the AP 200 (also a part of Ayyagari's

"AP"), is not a message received at the alleged "network device" from the alleged

"AP", but an internal "AP" message.

Based on the foregoing rationale, the Appellant maintains that Ayyagari

does not disclose or suggest "receiving at a network device, from one or both of

a first access point ..., a first messaging protocol message containing QoS

information," as recited in Appellant's claim 1. Singhal does not overcome

Ayyagari's above deficiency.

Thirdly, the Examiner's Answer (page 7) states the following:

"Even if they were the same device, an internal message sent from the access point to the router would still meet the limitation of the claims since it is not claimed that the receiving network device is

separate from the first access point and/or switch."

The Examiner seems to argue that Ayyagari's internal message sent

within the AP (i.e., from the AP 200 to the router 235) would allegedly read on

Appellant's claim 1, since Appellant's claim 1 allegedly recites that "the network

device, the first AP and/or the first switch are inseparable from each other". The

Appellant respectfully disagrees, and points out that the Examiner has given new

meaning to Appellant's claim language, namely, the Examiner alleges that "the

network device, the first AP and/or the first switch are inseparable from each

other" is evident from Appellant's claim 1.

The Appellant respectfully disagrees, and refers the Examiner to MPEP

2111.01, which states that "the words of a claim must be given their "plain

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meaning" unless they are defined in the specification. The Appellant's specification does not disclose that "the network device, the first AP and/or the first switch are inseparable from each other", as alleged by the Examiner. Likewise, Appellant's claim 1 also does not include the un-recited limitation alleged by the Examiner. In this regard, the Examiner seems to have improperly rejected Appellant's claim 1 based on un-recited claim limitation.

Furthermore, the Examiner's Answer (page 7) states the following:

"B) Appellant contends that Singhal does not disclose that the second messaging protocol is different from the first messaging protocol. In considering B), the Examiner respectfully disagrees. Singhal discloses the need to have wireless and wired capability in a routing device that can enforce quality of service metrics. Wired and wireless protocols use different messaging protocols, hence the need for a routing device that can support both. It would be obvious to one of ordinary skill in the art that if a router could support both wired and wireless protocols the router would distribute to wired devices using the wired messaging protocol and the wireless devices using the wireless messaging protocol."

The Appellant maintains the argument (see Appeal Brief in page 20) that Singhal does not even mention any "message", let alone "different messaging protocols" in a routing device. In this regard, the Examiner's argument that "Singhal discloses the need to have wireless and wired capability in a routing device that can enforce quality of service metrics" still does not support the Examiner's allegation that Singhal discloses that "a router could support both wired and wireless protocols the router would distribute to wired devices using

the wired messaging protocol and the wireless devices using the wireless

messaging protocol."

Therefore, Singhal does not overcome Ayyagari's deficiency, by disclosing

"distributing by said network device, QoS information corresponding to said

determined at least a minimum QoS level to one or more of said first switch, said

first access point, said second access point and/or said second switch, using a

second messaging protocol message, wherein said second messaging protocol

message is different from said first messaging protocol message," as recited in

Appellant's claim 1.

Based on the foregoing rationale, the Appellant maintains that the

combination of Ayyagari's and Singhal does not establish a prima facie case of

obviousness under 35 U.S.C. § 103(a) to reject claim 1, and therefore claim 1

should be allowable. The Appellant respectfully requests that the rejection of

independent claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Claims 10, 19 and 28 are similar in many respects to independent claim 1,

and therefore, claims 10, 19 and 28 are also allowable for the same rationale as

stated above with regard to claim 1. The Appellant respectfully requests that the

rejection of claims 10, 19 and 28 be also withdrawn.

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# I-B(1). Dependent Claims 5, 14, 23 and 32

The Appellant stands by the argument made in the corresponding section of the Appeal Brief. The Examiner's Answer (see page 7) states the following:

"Appellant contends that Ayyagari fails to disclose scheduling access by at least one of said plurality of access devices to one or both of said first and/or said second access points.

... the Examiner respectfully disagrees. Ayyagari discloses scheduling transmission of higher priority packets than packets having lower priority (see paragraph 31). That is access by nodes of higher priority will be scheduled before nodes of lower priority."

The Examiner's above response did not address Appellant's argument in the Appeal Brief (see page 22). Specifically, the Appellant argued that Ayyagari's **scheduling** is performed by the SBM 240 (being part of the alleged AP). In other words, the scheduling is performed by the AP, and not by any of the access devices (i.e., laptop 215, cellular telephone 210 or digitized pad 220). In addition, Singhal does not overcome the above deficiencies of Ayyagari.

Accordingly, the Appellant maintains that the combination of Ayyagari and Singhal does not disclose or suggest "scheduling access by at least one of said plurality of access devices to one or both of said first and/or said second access points," as recited in Appellant's claim 5. Claim 5 is submitted to be allowable. Claim 14, 23 and 32 are similar to claim 5 in many respects, and is also submitted to be allowable.

# I-B(2). Dependent Claims 6, 15, 24 and 33

The Appellant stands by the argument made in the corresponding section of the Appeal Brief. The Examiner's Answer (see page 7) states the following:

"Appellant contends that Ayyagari fails to disclose distributing said QoS information to at least a portion of the hybrid wired/wireless local area network... the Examiner respectfully disagrees. QoS information is distributed to a least a portion of the network because it is a QoS request. The request is either approved or denied by the network depending on whether the QoS can be supported. Therefore, QoS information is distributed to at least a portion of the hybrid wired/wireless local area network."

The Examiner's above response did not address Appellant's argument in the Appeal Brief (see page 22). Specifically, the Appellant argued that **it is the router of SBM** 240 (i.e., **the aggregate AP 200**), and not the wireless devices 210, 215 or 220 (the alleged "access devices"), which distributes the specified QoS to the receiving node 230. In addition, Singhal does not overcome the above deficiencies of Ayyagari.

Accordingly, the Appellant maintains that the combination of Ayyagari and Singhal does not disclose or suggest "said distributing comprises distributing said QoS information to at least a portion of the hybrid wired/wireless local area network," as recited in Appellant's claim 6. Claim 6 is submitted to be allowable. Claim 15, 24 and 33 are similar to claim 6 in many respects, and is also submitted to be allowable.

## I-B(3). Dependent Claims 7, 16, 25 and 34

The Appellant stands by the argument made in the corresponding section of the Appeal Brief. The Examiner's Answer (see page 8) states the following:

"E) Appellant contends that Ayyagari does not disclose allocating bandwidth to maintain said at least a minimum QoS level. In considering E), the Examiner respectfully disagrees. Allocating time intervals means allocating time that bandwidth is used by a certain device."

The Examiner's above response did not address Appellant's argument in the Appeal Brief (see page 22). Specifically, the Appellant argued that **it is the** "AP", and not the wireless devices 210, 215 or 220 (the alleged "access devices"), which allocated time intervals for transmission. In addition, the Appellant also points out that "time interval allocation" is unrelated to "bandwidth allocation". Singhal does not overcome the above deficiencies of Ayyagari.

Accordingly, the Appellant maintains that the combination of Ayyagari and Singhal does not disclose or suggest "allocating bandwidth to maintain said at least a minimum QoS level," as recited in Appellant's claim 7. Claim 7 is submitted to be allowable. Claim 16, 25 and 34 are similar to claim 7 in many respects, and is also submitted to be allowable.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-36.

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Response to Examiner's Answer of February 3, 2010

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## CONCLUSION

For at least the foregoing reasons, the Appellant submits that claims 1-36 are in condition of allowance. Reversal of the Examiner's rejection and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

Date: April 2, 2010 / Frankie W. Wong /

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